

## Options for Closing the Gap on Forestry Management Measures

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### Background/Context

This paper describes how Oregon may strengthen and expand its forest management measures in its coastal nonpoint management area in ways that will achieve a healthier resilient coastal environment where forest management measures satisfy the statutory objectives of the Coastal Zone Act Reauthorization Amendments (CZARA). It is premised on the fact that EPA and NOAA have found certain identifiable gaps in Oregon's coastal nonpoint program remain pertaining to the need for additional forestry measures that are necessary to achieve and maintain applicable water quality standards and protect designated beneficial uses.

### General CZARA Guidelines for Approval

There are two pathways for states to achieve an approvable program: 1) a *regulatory* approach and/or 2) a *voluntary approach*. A voluntary approach requires that the State provide the following<sup>1</sup>:

- a description of the voluntary programs, including the methods for tracking and evaluating those programs Oregon will use to encourage implementation of the management measures;
- a legal opinion from the attorney general or an attorney representing the agency with jurisdiction for enforcement that such authorities can be used to prevent nonpoint pollution and require management measure implementation, as necessary; and
- a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing authorities where necessary.

### Options for Oregon to Satisfy its CZARA Requirement to Adopt Additional Management Measures for Forestry

- **Riparian Protection**
  - **Small and Medium Fish-Bearing Streams: The State currently is pursuing a regulatory program:**
    - Current Deficiencies/Shortfall: Inadequate riparian protection for small and medium fish-bearing streams. Available data, including Ripstream Study data and

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<sup>1</sup> See NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs.  
<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>

analysis, shows that current Oregon Forest Practices Act measures do not ensure that forest operations meet Oregon’s narrative water quality criterion for protecting cold water (PCW) in small and medium fish-bearing streams. Importantly, unlike the PCW criterion, the CZARA program requirements are broad and apply to all waters not just waters currently inhabited by threatened or endangered salmonid fishes. The deficiency in protecting cold water and ensuring water quality is maintained applies to all small and medium fish-bearing streams across the coastal nonpoint management area.

- State Actions Needed: 1) **Complete riparian rulemaking by July 1, 2016;** 2) The rule should be designed to apply to **all** small and medium fish bearing streams and upstream waters; and 3) The rule should also include a means to monitor whether forest operations are complying with water quality standards, including the PCW criterion.
- **Non-Fish-Bearing Streams: State may pursue regulatory and/or voluntary approaches:**
  - Current Deficiencies/Shortfall: The Oregon Forest Practices Rules do not require riparian vegetation protections for small Type N streams in the Coast Range (reference: Table 5 for OAR 629-640-0200(6) – “Vegetation Retention for Specified Small Type N Streams” provides that “no vegetation” is required for the Coast Range). The RipStream Study results and earlier studies show that the State’s current Forest Practices Act measures on private forest land, including in the Coast Range (which encompasses most of the coastal nonpoint program management area), do not ensure that the State’s water quality standards are being met.

State Action Needed: **By July 1, 2016**, revise and implement additional management measures for riparian areas adjacent to small non-fish-bearing streams necessary to achieve and maintain water quality standards, including the PCW criterion, and protect designated beneficial uses. This could be done through regulatory or voluntary means (or a combination of both).

Voluntary—If the State chooses a voluntary approach to meet all or part of the non-fish bearing streams requirement, the State must also meet the following: **By July 1, 2016**, Oregon must demonstrate how it is showing compliance with elements of a voluntary program (see “General CZARA Guidelines for Approval” section above or NOAA and EPA’s 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs, <http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>, and NOAA and EPA’s 1995 “Flexibility for State Coastal Nonpoint Programs”, <http://coast.noaa.gov/czm/pollutioncontrol/media/6217flexibilityguidance.pdf>, including identification of enforceable “backstop” authorities that will be effective in achieving widespread implementation of the management measures. Such existing general authorities could include “bad actor” laws, enforceable

water quality standards, general environmental laws and prohibitions, and other existing authorities that will accomplish the implementation of the management measures without requiring new, more specific authorities).

- **Forestry Roads: Regulatory and/or voluntary approaches would need to address the following items:**

- Current Deficiencies/Shortfall:
  - *Regulatory* – Recent rule changes and new policies do not sufficiently address water quality impairments associated with “legacy” roads, (i.e., abandoned roads created prior to the Forestry Practices Act that would not meet current State requirements with respect to siting, construction, maintenance, and road drainage) or impairments associated with the portion of the existing road network where construction or reconstruction is not proposed.
  - *Voluntary* – ODF’s current voluntary program does not adequately address legacy roads, nor has the State incorporated all elements needed for a voluntary program (see above).
- Examples of State Actions Needed:
  - *Regulatory* – **By December 31, 2016**, establish regulations and or policies that address the above deficiencies.
  - *Voluntary* – **By July 1, 2016**, 1) establish a road survey or inventory program that considers active, inactive, and legacy/old roads that have the potential to deliver sediment to streams; 2) develop a ranking system to establish priorities for road repair or decommissioning; 3) develop a timeline for addressing priority road issues; and 4) develop a public reporting and tracking component to assess progress toward remediating identified forest road problems.

*For an effective voluntary approach, all of these actions (or a similar suite of actions) are needed as a package. The State must also meet other elements needed for a voluntary program (see General CZARA Guidelines for Approval section above or NOAA and EPA’s 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).*

- **Protection of Landslide-Prone Areas: Regulatory and/or voluntary approach would need to address the following items:**

- Current Deficiencies/Shortfall:

- *Regulatory* – Oregon’s current rules protect for public safety against shallow, rapidly moving landslides. Oregon does not have additional management measures for forestry in place to protect high-risk landslide areas to ensure water quality standards are met and designated uses are protected. While a natural rate of landslide activity is not preventable and is even desirable to provide large woody debris to enhance habitat complexity and value, there needs to be a balanced program that prevents human-induced landslide activity that adds excessive sediment to streams or degrades streams through debris flows, impairing water quality and blocking or impairing salmon habitat.
- *Voluntary* – The voluntary measure identified by the State gives landowners credit for leaving standing live trees in landslide prone slopes as an eventual source of large wood for fish-bearing streams. NOAA and EPA do not consider this voluntary action a sufficient management measure to reduce high-risk landslides that adversely affect water quality standards or designated uses. While this is a good management practice, the measure is not designed to prevent human-induced landslides, but rather to ensure large wood is available to provide additional stream complexity when a landslide occurs. In addition, the State has not demonstrated that its voluntary measure is effective in controlling the rate of human-induced landslides and debris flows. Furthermore, the State has not explained how it will monitor and track the implementation and effectiveness of voluntary measures; identified any enforceable back-up authority to ensure implementation of the voluntary measures; or provided a commitment to rely on that back-up authority to ensure effective implementation.
- Examples of State Actions Needed:
  - *Regulatory* – **By July 1, 2016**, establish a program that includes a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff and making maps of high-risk landslide areas available to foresters during harvest planning. Adopt BMPs to protect high-risk landslide areas that have the potential to impact water quality and designated uses, such as no-harvest restrictions on high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized.
  - *Voluntary* – **By July 1, 2016**, the State could pursue several actions that would collectively address this issue such as: 1) Develop a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff. 2) Develop robust voluntary programs to encourage and incentivize the use of forestry BMPs to protect high-risk landslide areas that have the potential to impact water quality and

designated uses, such as no-harvest restrictions on high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized. Wide dissemination of maps of high-risk landslide areas could improve water quality by informing foresters during harvest planning. 3) Institute a monitoring program to track compliance with the FPA rules and voluntary guidance for high-risk landslide-prone areas and the effectiveness of the practices in reducing slope failures. Identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented. 4) As appropriate, identify high-risk landslide prone areas and specific BMPs to protect these areas when TMDLs are developed.

*For all voluntary programs, the State must meet all elements needed for a voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).*

- **Spray Buffers for Aerial Application of Herbicides on Non-Fish-Bearing Streams: regulatory and/or voluntary approaches that could be established include the following items:**
  - Current Deficiencies/Shortfall:
    - *Regulatory* – The State does not have any “no-spray” buffer requirements to protect non-fish-bearing streams when herbicides are aerially applied.
    - *Voluntary* – Voluntary no-spray buffers do not exist, nor is there monitoring and tracking on non-fish-bearing streams.
  - Examples of State Actions Needed:
    - *Regulatory* – **By July 1, 2016**, 1) adopt rules for aerial herbicide spray buffers for small, non-fish-bearing streams; or 2) adopt riparian buffer protections for timber harvest along non-fish-bearing streams that are also designated no-spray buffers, provided such buffers are sufficiently wide to reduce pesticide loading in these streams during and shortly after aerial spraying.
    - *Voluntary* – **By July 1, 2016**, 1) expand existing guidelines to create and maintain voluntary buffers for the aerial application of herbicides on non-fish-bearing streams and educate and train applicators on the new guidance; 2) monitor and track that voluntary guidelines are followed; 3) identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented; 4) revise the ODF Notification of Operation form to include a check box for aerial applicators to acknowledge the need to comply with FIFRA labels, especially for

herbicides that are prohibited from use in/above waterbodies, for all stream types, including non-fish-bearing streams; and 5) track and evaluate the implementation of voluntary measures for the aerial application of herbicides along non-fish bearing streams to assess the effectiveness of these practices.

*For all voluntary programs, the State must meet all elements needed for a voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).*